

FLAUTNER et al
Appl. No. 10/687,924
May 11, 2006

REMARKS/ARGUMENTS

Claims 1, 3-8 and 10-14 stand finally rejected in the outstanding Official Action. Applicants amend claims 1 and 8 and therefore claims 1, 3-8 and 10-14 remain in the application.

The Examiner rejects claims 1, 3-8 and 10-14 under 35 USC §112 (second paragraph) as allegedly being indefinite. The Examiner suggests that in claims 1 and 8, the phrase "the count value" has no specific antecedent basis in the claim. This contention is respectfully traversed.

Claims 1 and 8 recite "a performance counter" for accumulating work done values in the apparatus and method claims, respectively. A "count value" is inherent in the operation of a "performance counter." Inherent components of elements recited in a claim do not require separate antecedent basis.

The Examiner's attention is directed to the Manual of Patent Examining Procedure (MPEP) which specifically states that

"inherent components of elements recited have antecedent basis in the recitation of the components themselves. For example, the limitation 'the outer surface of said sphere' would not require an antecedent recitation that the sphere has an outer surface." (MPEP Section 2173.05(e)).

In the present case, the recitation "the count value" does not require an antecedent recitation that the claimed "performance counter" has a "count value." Accordingly, there is no basis for rejecting claims 1 and 8 or claims dependent thereon under 35 USC §112 (second paragraph) as lacking proper antecedent basis.

However, to avoid any concern on the Examiner's part that there is not clear antecedent basis for the term "count value," Applicants have amended independent claims 1 and 8 to

FLAUTNER et al
Appl. No. 10/687,924
May 11, 2006

substitute the phrase "accumulated work done value" which has literal antecedent basis earlier in each of the claims. While it would be clear to one of ordinary skill in the art that the "count value" in previous claims 1 and 8 is the same value as "accumulated work done value," the Examiner may believe that the use of a phrase which has literal antecedent basis is more appropriate. Accordingly, Applicants propose this modification in claims 1 and 8.

The Examiner also rejects claims "1-14" [sic] (claims 2 and 9 have previously been cancelled) as being anticipated by Cooper (U.S. Patent 6,829,713). As will be seen, Cooper contains no disclosure of Applicants' claimed subject matter or method step.

Cooper utilizes the calculation of a work done value by incrementing the value by the same fixed value for all frequencies. Apparently Cooper does not recognize that the work done by a processor operating at a frequency of "2f" is not necessarily twice the amount of work done by that processor at a frequency of "f" even though twice the number of clock cycles occur when operating at the "2f" frequency. This anomaly is because the performance of the processor and its associated component may be more or less than might otherwise be expected at different frequencies.

Applicants' invention, both in the apparatus and method claims, solves the problem of inaccurate work assessment by requiring that the "work increment value is variable." Thus, if the processor is operating at a frequency where the work increment value is lower or higher than another frequency, it will accurately track the accumulated work done value. Not only does Applicants' claim specify that the "work increment value is variable," the claim also ties the work increment value to the clock signal frequency taken "at or close to a time that the accumulated work done value is incremented." Thus, there is a variable work increment value dependent

FLAUTNER et al
Appl. No. 10/687,924
May 11, 2006

upon the clock frequency at the time the accumulated work done value is incremented which allows Applicants' claimed apparatus and method to much more accurately track actual work done by a processor. Because the Cooper reference utilizes only a fixed value of work done per clock cycle, it cannot take into account the above anomaly of variations in work done based upon work done at different clock frequencies.

In view of the above, Cooper simply does not disclose Applicants' claimed subject matter and therefore cannot anticipate or render obvious the subject matter of Applicants' claims 1, 3-8 and 10-14.

Entry of the Amendment Under Rule 116

Entry of the above amendment to claims 1 and 8 pursuant to the provisions of 37 CFR 1.116 is respectfully requested. While Applicants believe that the previous claim language reciting "count value" has clear inherent antecedent basis in the phrase "a performance counter operable . . .," Applicants propose amending claims 1 and 8 to recite "accumulated work done value" which has literal antecedent basis in each of claims 1 and 8. Entry of this amendment would presumably obviate any objection or rejection by the Examiner under the provisions of 35 USC §112. The obviation of such a rejection would clearly lessen the issues on appeal. Entry of this amendment would not raise new issues requiring further consideration or search in that the phrase "accumulated work done value" has clear literal antecedent basis in the claims and therefore cannot possibly raise any new issue. No new claims are presented and no new matter is presented. Accordingly, it is submitted that the above amendments should be entered pursuant to the provisions of Rule 116 and expedited notice of the consideration of this Amendment is respectfully requested.

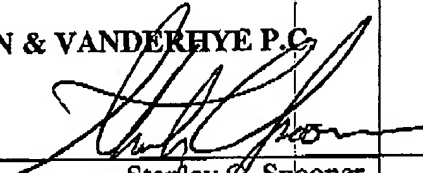
FLAUTNER et al
Appl. No. 10/687,924
May 11, 2006

Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that claims 1, 3-8 and 10-14 are in condition for allowance and notice to that effect is respectfully solicited. It is respectfully requested that the Examiner contact Applicants' undersigned representative regarding entry of this Amendment so that Applicants may timely file a Notice of Appeal without incurring further extensions of time. The Examiner is requested to contact Applicants' undersigned representative at (703) 816-4028 and provide a telephone indication of the entry or non-entry of this Amendment so that the proper appeal may be pursued.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:


Stanley G. Spooner
Reg. No. 27,393

SCS:kmm
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100